

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. FACTUAL BACKGROUND	2
A. The Disclosed Methods and Systems of Remote Refereeing	2
B. The Claimed Methods and Systems of Remote Refereeing	3
III. APPLICABLE LAW	5
A. Deciding the Patent Eligibility of the Asserted Claims is Appropriate Now	6
B. Invalidity of the Asserted Claims Does Not Require Claim-by-Claim Analysis	6
C. The Two-Part Test for Patent-Eligible Subject Matter	7
1. Step One: Are the Asserted Claims Directed to a Patent-Ineligible Abstract Idea?	7
2. Step Two: Do the Asserted Claims Recite Additional Elements Sufficient to Transform the Asserted Claims Into Patent-Eligible Subject Matter?	9
IV. ARGUMENT	9
A. The Asserted Claims Are Invalid for Claiming Patent-Ineligible Subject Matter	11
1. Step One: The Asserted Claims Recite an Abstract Idea	11
2. Step Two: The Asserted Claims Do Not Recite Inventive Concepts that Transform the Recited Abstract Idea Into Patent-Eligible Subject Matter	13
V. CONCLUSION	15

TABLE OF AUTHORITIES**Page(s)****Cases**

<i>02 Media, LLC v. Narrative Science Inc.</i> , 149 F.Supp.3d 984, 994 (N.D. Ill. 2016)	12
<i>Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.</i> , 728 F.3d 1336 (Fed. Cir. 2013)	7
<i>Alice Corp. v. CLS Bank Int'l</i> , 134 S. Ct. 2347 (2014)	<i>passim</i>
<i>Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada (U.S.)</i> , 687 F.3d 1266 (Fed. Cir. 2012)	6
<i>Berkheimer v. Hewlett-Packard Company</i> , 12-C-9023, 2016 WL 7188159 (N.D. Ill. Dec. 12, 2016)	12
<i>In re Bilski</i> , 545 F.3d 943 (Fed. Cir. 2008)	6
<i>Bilski v. Kappos</i> , 561 U.S. 593 (2010)	6, 7
<i>Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass'n</i> , 776 F.3d 1343 (Fed. Cir. 2014)	6, 9, 10, 13
<i>Electric Power Group, LLC v. Alstom S.A.</i> , 830 F.3d 1350 (Fed. Cir. 2016)	<i>passim</i>
<i>Intellectual Ventures I LLC v. Capital One Bank (USA)</i> , 792 F.3d 1363 (Fed. Cir. 2015)	8
<i>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</i> , 132 S. Ct. 1289 (2012)	7, 8
<i>Nextpoint, Inc. v. Hewlett-Packard Co., et al.</i> , No. 15 C 8550, 2016 WL 3181705 (N.D. Ill. June 6, 2016)	6
<i>OIP Techs., Inc. v. Amazon.com, Inc.</i> , 788 F.3d 1359 (Fed. Cir.), cert. denied, 136 S. Ct. 701, 193 L. Ed. 2d 522 (2015)	8
<i>Planet Bingo, LLC v. VKGS LLC</i> , 576 Fed.Appx. 1005 (Fed. Cir. 2014)	7, 8, 12, 15

<i>RaceTech, LLC v. Kentucky Downs, LLC</i> , 167 F.Supp.3d 853, 862-64 (W.D. Kentucky), <i>aff'd</i> 2017 WL 563154 (Fed. Cir. 2017).....	9
<i>In re Smith</i> , 815 F.3d 816 (Fed. Cir. 2016)	9
<i>TDE Petroleum Data Solutions, Inc. v. AKM Enterprise, Inc.</i> , 657 Fed.Appx. 991 (Fed. Cir. 2016).....	15
<i>Tech. Dev. & Licensing, LLC v. General Instr. Corp.</i> , No. 07-C-4512, 2016 WL 7104253 (N.D. Ill. Dec. 6, 2016)	13
<i>In re TLI Communications LLC Patent Litigation</i> , 823 F.3d 607 (Fed. Cir. 2016)	8, 13
<i>Ultramercial, Inc. v. Hulu, LLC</i> , 772 F.3d 709 (Fed. Cir. 2014)	2, 6, 7
<i>Wireless Media Innovations LLC</i> , 100 F.Supp.3d 405, 415-415 (D. New Jersey), <i>aff'd</i> 2016 WL 463218 (Fed. Cir. 2016).....	8, 9
Statutes	
35 U.S.C. § 101.....	<i>passim</i>
Other Authorities	
Rule 12(b)(6)	2, 6

I. INTRODUCTION

Gaelco claims to own the abstract idea of remotely refereeing a dart competition.¹ This is inappropriate and such an abstract idea is ineligible for patent protection pursuant to 35 U.S.C. § 101. The Supreme Court has articulated a two-step analysis to determine whether patent claims are ineligible for protection under Section 101. The first step is to determine if the claims are directed to an abstract idea. If they are, the Court then determines whether the claims contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application. Claims that are directed to an abstract idea and lack a transformative inventive concept are invalid under Section 101. *See Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2353 (2014).

Here, the Asserted Claims claim the abstract idea of remotely refereeing a dart competition, purportedly teaching systems and methods where (1) dart players' conduct is captured via camera; (2) that information is transmitted to a refereeing center; (3) a determination is made at the refereeing center whether a rule has been infringed; and (4) the decision from the refereeing center is transmitted and displayed at the dart machine. This is merely data collection, analysis, and display and falls into a "familiar class of claims directed to a patent-ineligible concept" where the claims focus on "collecting information, analyzing it, and displaying certain results of the collection and analysis." *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

At the second step, it is clear that the Asserted Claims do not contain additional claim elements that introduce an inventive concept sufficient to elevate the claims to patent-eligible subject matter. Instead, the '083 Patent teaches utilizing well-known, conventional components – the internet, computer monitors and dart boards – in their conventional manner, both by themselves and in combination with each

¹ Plaintiffs Gaelco S.A. and Gaelco Darts S.L. (collectively, "Gaelco") assert claims 1, 7, 9-14, and 19 of U.S. Patent No. 7,361,083 (the "'083 Patent") against Defendant Arachnid 360, LLC ("Arachnid") (the "Asserted Claims"). *See* Dkt. No. 1, ¶¶ 15, 24. To the extent that Gaelco later seeks to assert additional claims, Arachnid reserves its right to challenge those claims on the same or similar grounds.

other. For instance, the network (e.g., the internet) is used to transfer data; the monitor is used to monitor the dart competition; the camera is used to capture an image; darts and dart machines are used to play darts. Applying an abstract idea through the use of conventional components is not an inventive concept sufficient to save the Asserted Claims. *See id.* at 1355.

Arachnid appropriately asks this Court to address the issue of patentable subject matter early in this case. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 714-717 (Fed. Cir. 2014) (noting the import of addressing Section 101 early in a case and affirming a Rule 12(b)(6) dismissal). Resolving whether patent claims are directed to unpatentable subject matter saves judicial resources, the parties' resources, and protects the public from "patents that stifle innovation and transgress the public domain." *Ultramercial*, 772 F.3d 709, 718-720 (Mayer, J., concurring). As explained in more detail below, the Asserted Claims are invalid as a matter of law.

II. FACTUAL BACKGROUND

A. The Disclosed Methods and Systems of Remote Refereeing

The '083 Patent provides minimal teaching, consisting of only five figures and eight total columns, including the '083 Patent's claims. What is included, however, highlights the disclosed abstract idea of remotely refereeing a dart competition, using conventional components. The Description of the Invention states:

Another object the [sic] invention is to provide a method to manage the refereeing of the games played on amusement machines wherein a human or non-human referee can make decisions at a remote site . . . the system and method enables game play to be monitored and refereed, cheating to be reduced and enhances fair competition in games and between players.²

In order to enable this remote refereeing, the '083 Patent describes using conventional, well-known components such as cameras, score boards, sensors, the internet, monitors, and computers.³ The

² Dkt. No. 1, Exhibit A, '083 Patent, col. 2:40-50.

³ *See e.g.*, Dkt. No. 1, Exhibit A, '083 Patent, cols. 2:54-3:5; 5:9-26.

'083 Patent explains that these components allow the referee to decide "if the games selected have been played without infringing the rules of play . . .".⁴ The '083 Patent does not claim a unique (or any) algorithm related to the refereeing decision, require the use of a unique system architecture, teach the use of unconventional components, or teach a unique combination of components.

B. The Claimed Methods and Systems of Remote Refereeing

Claims 1 and 10 of the Asserted Claims are independent claims from which the other Asserted Claims depend. Claim 1 is representative of the Asserted Claims and reads:

A remote monitoring or refereeing system for one or more dart machines comprising:
one or more dart machines, each of the one or more dart machines comprising:

play components and means to capture multimedia information relating to
conduct of play and performance of players using the one or more dart
machines;

at least one camera to capture the conduct of play; and

means for transmitting the multimedia and captured conduct of play
information, and

at least one refereeing center to receive multimedia and captured conduct of play
information, to determine whether at least one of the players complies with at
least one condition of play, either nearly instantaneously or with a time delay,
and to transmit data including the determination as to whether at least one of the
players complies with at least one condition of play to the one or more dart
machines.⁵

Claim 10 is substantially similar to claim 1 but is drafted as a method claim. The method comprises (1) capturing a portion of play and an image of the area of play and the player; (2) transmitting the result and the image to a refereeing center to be evaluated by a referee; (3) enabling a decision by the referee as to whether a rule has been infringed; (4) transmitting the refereeing decision to corresponding dart machines; and (5) displaying the decision.⁶

⁴ Dkt. No. 1, Exhibit A, '083 Patent, col. 5:55-58.

⁵ Dkt. No. 1, Exhibit A, '083 Patent, col. 6:30-49.

⁶ Dkt. No. 1, Exhibit A, '083 Patent, col. 7:17-8:8.

The remainder of the Asserted Claims each depend from either claim 1 or claim 10 and claim the same abstract idea of remotely refereeing a dart competition. Some of the Asserted Claims recite additional limitations, including real-time refereeing and the use of other conventional components. The following table identifies the dependent Asserted Claims and summarizes the added limitation(s) by the respective claim.

Dependent Claim	Added Subject Matter⁷
Claim 7 (depends from claim 1)	This claim adds a monitor to display information from the dart machines, where the information comprises direct or pre-recorded images, text, or computer-generated media.
Claim 9 (depends from claim 1)	This claim adds the limitation where the “play components” comprise one or more darts and a dart board.
Claim 11 (depends from claim 10)	This claim adds that the performance of the players is refereed in real time.
Claim 12 (depends from claim 10)	This claim adds that the decision by a referee occurs in real time in a competition between two players who are in different locations.
Claim 13 (depends from claim 10)	This claim adds that the decision by a referee occurs with a time delay.
Claim 14 (depends from claim 10)	This claim adds where the decision by a referee is based on the result and the image transmitted to the one or more refereeing centers.
Claim 19 (depends from claim 10)	This claim adds that the referee is a human operator assisted by electronic devices.

As the above table shows, all Asserted Claims recite the abstract idea of remotely refereeing a dart competition. The Asserted Claims utilize conventional components, such as generic sensors, monitors, dart boards, and electronic devices, as taught by the '083 Patent's specification.⁸ Neither the

⁷ Exhibit 1 to Docket No. 1 includes the full text of the Asserted Claims. See Dkt. No. 1, Exhibit A, '083 Patent, col. 6:32-8:34.

⁸ See e.g., Dkt. No. 1, Exhibit A, '083 Patent, cols. 2:54-3:5.

Asserted Claims nor the '083 Patent in general purports to use these conventional components in any new or inventive way. The '083 Patent does not purport to have invented any new or improved technological process. Instead, the '083 Patent describes routine, everyday uses for components in exactly the fashion that they are intended to be used.

For instance, the '083 Patent teaches that “the multimedia information and other data may be transmitted over a network (e.g., a LAN, WAN, the Internet, a wireless network, a cellular network, etc.) to an appropriate device (e.g., monitors, computers, speakers, etc.) at the refereeing center.”⁹ The systems and methods consider implementing generic “computer-assisted refereeing means,” including “a luminous source of visible light . . . to project lines, boundaries, or other limits of the area of play...”¹⁰ The refereeing center can simply be a “call center for a game promoter and conveniently comprise monitors to monitor the state of development of the games . . .”¹¹ The refereeing center “may also comprise a multimedia telecommunications system,” including microphones, speakers, video monitors, and cameras.”¹² These components are all used for their conventional purposes, just as one would expect them to be used: the network (e.g., the internet) is used to transfer data; the monitor is used to monitor the dart competition; the camera is used to capture an image; darts and dart machines are used to play darts.

III. APPLICABLE LAW

The Patent Statute defines patentable subject matter as “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.”¹³ Despite the seeming breadth of that text, the Supreme Court has recognized an “important implicit exception:

⁹ Dkt. No. 1, Exhibit A, '083 Patent, cols. 2:67-3:5.

¹⁰ Dkt. No. 1, Exhibit A, '083 Patent, col. 3:10-15.

¹¹ Dkt. No. 1, Exhibit A, '083 Patent, col. 3:24-28.

¹² Dkt. No. 1, Exhibit A, '083 Patent, col. 3:31-35.

¹³ 35 U.S.C. § 101.

Laws of nature, natural phenomena and abstract ideas are not patentable.” *Alice*, 134 S. Ct. at 2354.

These exceptions are not patentable because they are basic tools of invention and innovation that are free for all to use. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010).

A. Deciding the Patent Eligibility of the Asserted Claims is Appropriate Now

Arachnid moves to dismiss Gaelco’s complaint because the Asserted Claims are invalid as a matter of law, and Gaelco’s complaint, therefore, fails to state a claim upon which relief can be granted. Fed. R. Civ. P. 12(b)(6). Whether a claim recites patent-ineligible subject matter is a question of law. *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008). This determination is a threshold inquiry that is properly decided on the pleadings. *See Ultramercial*, 772 F.3d at 717. The Federal Circuit and district courts have made clear that Section 101 patent eligibility may be, and regularly is, decided at the pleadings stage, without claim construction. *See, e.g., Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada (U.S.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012) (explaining the Federal Circuit “perceive[s] no flaw in the notion that claim construction is not an inviolable prerequisite to a validity determination under § 101”); *see also Nextpoint, Inc. v. Hewlett-Packard Co., et al.*, No. 15 C 8550, 2016 WL 3181705, at *3 (N.D. Ill. June 6, 2016). Deciding the patent eligibility of the Asserted Claims is appropriate now.

B. Invalidity of the Asserted Claims Does Not Require Claim-by-Claim Analysis

The Federal Circuit has held that an extended claim-by-claim analysis is not necessary where multiple claims are “substantially similar and linked to the same abstract idea.” *Content Extraction and Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 134 (Fed. Cir. 2014) (citations omitted); *see also Alice*, 134 S.Ct. at 2359 (finding a single method claim “representative” of all claims across four patents). While, the Asserted Claims consist of both system and method claims, they “contain only minor differences in terminology [and] require performance of the same basic process”

and, therefore, “should rise or fall together.” *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344 (Fed. Cir. 2013) (citations omitted); *see also Planet Bingo, LLC v. VKGS LLC*, 576 Fed.Appx. 1005, 1007 (Fed. Cir. 2014). The Supreme Court in *Alice* found that the system and method claims fall together, noting that the system’s hardware “is purely functional and generic,” and the system claims are “no different from the method claims in substance.” *Alice*, 134 S.Ct. at 2360. Because the Asserted Claims all “suffer from the same infirmity as claim 1, [they] need not be considered further.” *Ultramercial, Inc. v. Hulu, LLC* 772 F.3d 709, 712 (Fed. Cir. 2014).

C. The Two-Part Test for Patent-Eligible Subject Matter

The Supreme Court in *Alice* reaffirmed the two-step process to determine whether claims recite patent-eligible subject matter. *Alice*, 134 S. Ct. at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296-97 (2012)). The first step is to determine whether the claims at issue are directed to patent-ineligible concepts, such as abstract ideas. *Id.* If the claims recite an abstract idea, the Court proceeds to the second step to determine if there are additional claim elements that introduce an inventive aspect to the claims sufficient to elevate them to patent-eligible subject matter. *Alice*, 134 S. Ct. at 2355.

1. Step One: Are the Asserted Claims Directed to a Patent-Ineligible Abstract Idea?

In assessing the first step, the Supreme Court has repeatedly confirmed that abstract ideas, such as ordinary human activities, are invalid under Section 101 as being directed to unpatentable subject matter, unless the claims add inventive claim limitations to the activity. In *Alice*, the Supreme Court held that computerization of the ordinary human activity of maintaining escrow accounts is not patentable subject matter. 134 S. Ct. 2347 (2014). In *Bilski v. Kappos*, the Supreme Court held that the ordinary activity of hedging losses is not patentable. 130 S. Ct. 3218, 3229-30 (2010). And in *Mayo*

Collaborative Servs. v. Prometheus Labs., Inc., the Supreme Court held that the ordinary human activity of observing correlations is not patentable. 132 S. Ct. 1289, 1293-94 (2012).

The Federal Circuit has consistently found the idea of collecting, analyzing, and displaying information, even when particularly limited, to be an abstract idea. *Electric Power*, 830 F.3d at 1353-54 (collecting cases). For example, in *Electric Power*, the Federal Circuit invalidated both system and method claims directed to “collecting information, analyzing it, and displaying certain results of the collection and analysis” because they merely recited an abstract idea. 830 F.3d at 1353. The Federal Circuit noted that it has “treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract idea category.” *Id.* (citations omitted).

Abstract ideas are not limited to natural human activities or financial/business methods and systems. For example, the Federal Circuit has invalidated patent claims directed to the following abstract ideas: (1) methods and systems of managing a game of bingo; (2) an apparatus and method of classifying an image and storing the image based on the classification; (3) a method and system of tracking and documenting shipping containers; (4) a method and system of tracking financial transactions to determine whether they exceed a spending limit (i.e., budgeting); (5) a method of price optimization; (6) methods of collecting data, recognizing certain data within the collected data set, and storing that recognized data in a memory; (7) gaming systems and methods related to pari-mutuel wagering on historical events; and (8) methods related to rules for playing a wagering game, using conventional steps of shuffling and dealing cards.¹⁴

¹⁴ See respectively, (1) *Planet Bingo*, 576 Fed.Appx. at 1007-08; (2) *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607, 611 (Fed. Cir. 2016); (3) *Wireless Media Innovations LLC*, 100 F.Supp.3d 405, 415-415 (D. New Jersey), *aff'd* 2016 WL 463218 (Fed. Cir. 2016); (4) *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015); (5) *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir.), cert. denied, 136 S. Ct. 701, 193 L. Ed. 2d 522

2. Step Two: Do the Asserted Claims Recite Additional Elements Sufficient to Transform the Asserted Claims Into Patent-Eligible Subject Matter?

As to the second step, the court “examine[s] the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 134 S. Ct. at 2357. In other words, if a claim recites an abstract idea, it “must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* This step is a search for an “inventive concept” – “an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Alice*, 134 S.Ct. at 2355.

Reciting generic or conventional components used in their conventional manner does not transform an abstract idea into patentable subject matter. *Id.* at 2359-60. The Supreme Court in *Alice* held that elements that add nothing beyond their well-known functions do not transform an abstract idea into patent-eligible subject matter. *Id.* (using a computer to obtain data, adjust account balances based on the data, and issue automated instructions is well known and does not transform an abstract idea into a patentable-eligible invention). The *Alice* Court explained that adding “well-understood, routine, conventional activit[ies]” previously known to the industry does not constitute Section 101 patent-eligible material. *Id.* at 2359; *see also Wireless Media Innovations*, 100 F.Supp.3d at 415-415 (conventional components such as vehicles, optical scanners, and computers do not transform an abstract idea into patentable subject matter).

IV. ARGUMENT

The Asserted Claims represent nothing more than the abstract idea of remotely refereeing a dart competition. Refereeing is an abstract idea and comparable to abstract ideas that the Federal Circuit

(2015); (6) *Content Extraction*, 776 F.3d at 1347; (7) *RaceTech, LLC v. Kentucky Downs, LLC*, 167 F.Supp.3d 853, 862-64 (W.D. Kentucky), *aff’d* 2017 WL 563154 (Fed. Cir. 2017); (8) *In re Smith*, 815 F.3d 816, 817-819 (Fed. Cir. 2016).

has consistently held to be patent-ineligible. *See Electric Power*, 830 F.3d at 1353-54 (finding the process of gathering information, analyzing it, and displaying the results to be directed to an abstract idea) (collecting cases). Claiming the idea of collecting information, analyzing the information, and displaying the analysis is not only abstract, it is also something that has been done by humans long before the advent of computers and the internet. This is especially apparent with the Asserted Claims: the referee collects information (e.g., views the dart competition), analyzes said information (e.g., determines the existence of an infraction), and then displays the decision (e.g., a foul was committed). The only difference here is that the referee is remote and aided by conventional components (e.g., cameras and the internet). The '083 Patent even contemplates a human as the remote referee.¹⁵

The Asserted Claims' and the '083 Patent specification's recitation of conventional components – such as a dart board, sensors, cameras, the internet, or video monitors – does not transform the abstract concept into patent-eligible subject matter. In *Electric Power*, the Federal Circuit concluded that adding “off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information . . . [is] insufficient to pass the test of an inventive concept in the application of an abstract idea.” 830 F.3d at 1355 (citations omitted); *see also Content Extraction*, 776 F.3d at 1348 (adding hard copy documents and a scanner did not transform an abstract idea into patent-eligible subject matter).

The '083 Patent does not teach, or even claim to teach, the use of unique components or conventional components used in a unique fashion. Instead, the abstract idea claimed in the Asserted Claims is applied utilizing conventional components in their typical manner. This does not transform the abstract activity of remotely refereeing a dart competition, and the '083 Patent is invalid for claiming patent-ineligible material.

¹⁵ *See e.g.*, Dkt. No. 1, Exhibit A, '083 Patent, col. 2:40-44; claim 19.

A. The Asserted Claims Are Invalid for Claiming Patent-Ineligible Subject Matter

1. Step One: The Asserted Claims Recite an Abstract Idea

On their face, the Asserted Claims recite the abstract idea of remotely refereeing a dart competition. For example, claim 1 reads:

A remote monitoring or refereeing system for one or more dart machines comprising:
one or more dart machines, each of the one or more dart machines comprising:

play components and means to capture multimedia information relating to conduct of play and performance of players using the one or more dart machines;

at least one camera to capture the conduct of play; and

means for transmitting the multimedia and captured conduct of play information, and

at least one refereeing center to receive multimedia and captured conduct of play information, to determine whether at least one of the players complies with at least one condition of play, either nearly instantaneously or with a time delay, and to transmit data including the determination as to whether at least one of the players complies with at least one condition of play to the one or more dart machines.¹⁶

Claim 1 comprises ordinary human activities: (1) observing/capturing the play and performance of players playing darts; (2) determining whether the players comply with a condition of play; and (3) displaying the determination (i.e., refereeing).

The Asserted Claims are analogous to abstract ideas that the Federal Circuit has consistently found to be patent-ineligible. In *Electric Power*, the Federal Circuit analyzed patent eligibility of three patents that claim systems and methods for “performing real-time performance monitoring of an electric power grid by collecting data from multiple data sources, analyzing the data, and displaying the results.” *Electric Power*, 830 F.3d at 1351. The Federal Circuit confirmed that it has “treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas.” *Electric Power*, 830 F.3d at 1353.

¹⁶ Dkt. No. 1, Exhibit A, '083 Patent, col. 6:30-49.

The Asserted Claims are no less abstract. Collecting information from multiple sources, analyzing the information, and displaying the results – regardless of whether that collection of information is of a dart competition or electric grids – is performance monitoring, an abstract idea. The only advance the Asserted Claims “purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions. They are therefore directed to an abstract idea.” *Electric Power*, 830 F.3d at 1354. The Federal Circuit noted that it has “treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract idea category.” *Id.* at 1353 (citations omitted). Refereeing is exactly that – analyzing information in one’s mind – and with the Asserted Claims, it is actually utilizing a human mind.¹⁷ This is an abstract idea. *Id.*; see also *Berkheimer v. Hewlett-Packard Company*, 12-C-9023, 2016 WL 7188159 at *5-7 (N.D. Ill. Dec. 12, 2016) (finding claims directed to collecting, organizing, comparing, and presenting data for reconciliation prior to archival to be invalid); *02 Media, LLC v. Narrative Science Inc.*, 149 F.Supp.3d 984, 994 (N.D. Ill. 2016) (finding systems and methods directed to generating reports relating to selected data as nothing more than finding, organizing, analyzing, and presenting information and, therefore, unpatentable).

The Asserted Claims are also comparable to the systems and methods found to be invalid in *Planet Bingo*. Even though the *Planet Bingo* claims were directed to solving tampering and security problems, the Federal Circuit found the claims directed to managing a game of bingo to be abstract, noting that it is “similar to the kind of ‘organizing human activity’ at issue in *Alice*” and that the abstract idea “consists solely of mental steps which can be carried out by a human using pen and paper.” *Planet Bingo*, 576 Fed.Appx. at 1007-1008. Like the claims at issue in *Planet Bingo*, the

¹⁷ See e.g., Dkt. No. 1, Exhibit A, '083 Patent, col. 2:40-44; claim 19.

Asserted Claims are merely organizing the human activity (i.e., refereeing) and, therefore, an abstract idea.¹⁸

2. Step Two: The Asserted Claims Do Not Recite Inventive Concepts that Transform the Recited Abstract Idea Into Patent-Eligible Subject Matter

The Asserted Claims do not recite any inventive concepts to transform the claimed abstract idea into patent-eligible subject matter. *See Alice*, 134 S. Ct. at 2355. To qualify as patent-eligible subject matter, a claim must recite “significantly more” than the abstract idea, for example by “improv[ing] an existing technological process,” and not merely by “implement[ing] [the idea] on a computer.” *Id.* at 2358. Incorporating computer hardware or common, generic devices does not render an abstract idea patent-eligible. *Id.* In *Alice*, the Supreme Court found that the recitation of generic computer hardware did not provide any additional inventive or transformative concept sufficient to confer patent eligibility. *Alice*, 134 S. Ct. at 2359; *see also In re TLI Communications*, 823 F.3d at 613 (“mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea”); *Tech. Dev. & Licensing, LLC v. General Instr. Corp.*, No. 07-C-4512, 2016 WL 7104253, at *6 (N.D. Ill. Dec. 6, 2016) (“use of widely-used and well-known tools” to implement the abstract idea is not an inventive concept).

Here, the Asserted Claims recite using conventional devices for their conventional purpose – e.g., the internet to transmit data; cameras to capture images; dart machines and darts to play darts; a display to display information. This is not sufficient to transform the recited abstract idea into patent-eligible subject matter. *Id.*; *see also Content Extraction*, 776 F.3d at 1348 (finding claims that recite the use of existing scanning and processing technology to recognize and store data from specific data fields to be invalid).

¹⁸ Here, the Asserted Claims are even more in line with the “organizing human activity” reasoning because the Asserted Claims contemplate and teach utilizing an actual human, not a machine performing human-like activities. *See e.g.*, Dkt. No. 1, Exhibit A, ’083 Patent, col. 2:40-44; claim 19.

Nothing in the '083 Patent demonstrates that the generic components function in an unconventional manner – whether by themselves or in combination with each other – or employ specific programming to constitute inventive concepts. Instead, the '083 Patent recites the generic components to enable the abstract idea, often as merely examples in parentheses. For instance, the '083 Patent states that “the multimedia information and other data may be transmitted over a network (e.g., a LAN, WAN, the Internet, a wireless network, a cellular network, etc.) to an appropriate receive device (e.g., monitors, computers, speakers, etc.) at the refereeing center.”¹⁹

These conventional components are not sufficient to transform the abstract idea into patent-eligible subject matter. *See Elec. Power Group*, 830 F.3d at 1354-55. Two recent cases from the Federal Circuit make it even more apparent that the Asserted Claims do not contain an inventive concept. In *Electric Power*, the Federal Circuit confirmed that monitoring and collecting data from multiple data sources, analyzing the data, and displaying the results is an abstract idea. *Electric Power*, 830 F.3d at 1351. At step two of the *Alice* analysis, the Federal Circuit reasoned that “limiting the claims to the particular technological environment of power-grid monitoring is, without more, insufficient to transform them into patent-eligible applications of the abstract idea at their core.” *Id.* at 1354. Just like limiting the abstract idea to power-grid monitoring did not save the patents in *Electric Power*, limiting the abstract idea to refereeing darts cannot save the Asserted Claims. *Id.* at 1354.

Furthermore, “merely selecting information, by content or source, for collection, analysis, and display does nothing significant to differentiate a process from ordinary mental processes, whose implicit exclusion from § 101 undergirds the information-based category of abstract ideas.” *Id.* at 1355. Similar to the patents in *Electric Power*, nothing in the Asserted Claims “require[] anything other than off-the-shelf, conventional computer, network, and display technology for gathering,

¹⁹ Dkt. No. 1, Exhibit A, '083 Patent, cols. 2:67-3:4.

sending, and presenting the desired information” and, therefore, do[es] not include an “inventive concept of the application.” *Id.*; see also *Planet Bingo*, 576 Fed.Appx. at 1008-09 (finding a computer, memory, inputs and outputs, a printer, and video screen to be non-inventive components used for the generic function of storing, retrieving, and verifying a chosen set of bingo numbers). The Asserted Claims do “not even require a new source or type of information, or new techniques for analyzing [the information].” *Electric Power*, 830 F.3d at 1355. Instead of teaching a new technique for analyzing information, the Asserted Claims teach a human referee.²⁰

Furthermore, the Asserted Claims do not claim an inventive use or combination of generic components. Instead, the ’083 Patent teaches utilizing the claimed components in their normal fashion. The Federal Circuit in *TDE Petroleum* further highlights why the Asserted Claims do not contain an inventive concept: “TDE does not and cannot argue that storing state values, receiving sensor data, validating sensor data, or determining a state based on sensor data is individually inventive. And none of TDE’s arguments show that some inventive concept arises from the ordered combination of these steps, which, even if true, would be unpersuasive given that they are the most ordinary of steps in data analysis and are recited in the ordinary order.” *TDE Petroleum Data Solutions, Inc. v. AKM Enterprise, Inc.*, 657 Fed.Appx. 991, 993 (Fed. Cir. 2016). The ordered combination of the steps in the Asserted Claims are ordinary data collection, analysis, and display steps in the ordinary, commonsensical order. The Asserted Claims contain no inventive concept, and the Federal Circuit’s case law affirms this. As a result, the Asserted Claims are invalid as being directed to patent-ineligible subject matter.

V. CONCLUSION

For the foregoing reasons, Arachnid respectfully requests that the Court find the Asserted Claims directed to patent-ineligible subject matter and invalid pursuant to 35 U.S.C. § 101.

²⁰ See e.g., Dkt. No. 1, Exhibit A, ’083 Patent, col. 2:40-44; claim 19.

Dated: March 13, 2017

Respectfully submitted,

/s/ R. David Donoghue

R. David Donoghue
Steven E. Jedlinski
Anthony J. Fuga
HOLLAND & KNIGHT LLP
131 South Dearborn Street, 30th floor
Chicago, IL 60603
Tel: (312) 263-3600
Fax: (312) 578-6666
david.donoghue@hklaw.com
steven.jedlinski@hklaw.com
anthony.fuga@hklaw.com

Attorneys for Defendant Arachnid 360, LLC

CERTIFICATE OF SERVICE

I hereby certify that on March 13, 2017 I filed the above paper entitled **Defendant Arachnid 360, LLC's Memorandum in Support of its Motion to Dismiss** with the Clerk of Court using the CM/ECF system which will send notification of such filing via electronic mail to all counsel of record.

/s/ R. David Donoghue

R. David Donoghue